Islands in the Stream 2002:
Exploring Underwater Oases

Dive Summary

Stetson Lophelia Bank 4
8/20/2002
Discovery of New Resources with Pharmaceutical Potential and Exploration of Vision and Bioluminescence in the Deep-sea Benthos

Overview of Dive JSL2-3317 at Stetson Lophelia Bank 4

Don Liberatore piloted this dive with aft technician Jim Pierce at the site known as Stetson Lophelia Bank 4 (32° 01.2586N / 077° 39.6625W) on 8/20/2002 starting at 16:23:00. Total dive time was 3:32:00 and the maximum depth reached was 2560 feet. Scientific observers were John Reed and Nicholas Joannin. (All times EDT)

Dive Objectives. Objectives accomplished during the dive include:

Exploration/Recon	Primary
Habitat Assessment	Primary
Benthic Assessment	Primary
Geologic Assessment	Primary
Filming	Secondary
Sample Collection	Secondary
Education/Outreach	Secondary

Data Collected. Types of data collected during the dive include:

CTD File Raw	jsl2_3317_ctd.zip
Track File Shape	jsl2_3317_trk.zip
Track File WPT	jsl2_3317_wpt.zip
Track File Raw	jsl2_3317_raw.zip
MiniDV	JSL2-3317-1
MiniDV	JSL2-3317-2

Living Marine Resources Abundance

few 2-10; many 11 - 100; abundant >100

Pelagic Fish	Many
Bottom Fish	Many
Crustacean	Few
Mollusk	Few
Echinoderm	Many

Other Benthic Abundant

Dominant-coral, sponges, gorgonacea

Observations and Comments on Living Marine Resources:

Very divers invert community

General Comments

None.

Prepared by :
National Oceanic and Atmospheric Administration
8/20/2002

Dive Track Description

Site Name: "Reed's Peak"; Stetson Banks Reef Site
General Description: Deep-water Lophelia Coral Reef, 500' high pinnacle, with 20- 80 degree south slope, and flat top. Prior to dive North to South transect and plot using IMP sub tracker indicated a 500' high pinnacle, 2050' at peak, and 2550' at south base ~0.5 nm distance. This reef represents one of the highest deep-water Lophelia coral pinnacles known; nearly 500 feet tall. The lower slope from 2500- 2300 feet, is a gentle slope of 10-30 degrees with a series of terraces and ridges that have 100% cover of live and dead coral rubble, and a great diversity of associated fauna. The upper slope, from 2200' to the top at 2050', is steeper, 45-90 degrees, with more exposed rock, and even greater diversity and density of corals, sponges, and gorgonians. No large fish were seen. Although there were no areas of extensive, massive coral growth, there was an abundance of small, 6"-12" live Lophelia corals. Some black coral was also found and sampled. Relief of features observed during the dive ranged from to 500ft. meters.

Observed Human Activities

None

Observed Human Impacts

None

Overall Dive Site Ratings

1 = low; 10 = high

uniqueness	10
Health	10
disturbance	10
Biodiversity	10

Observed Fish Abundance

few 2-10; many 11 - 100; abundant >100